'Youth-at-Risk' –2009 Gender & Health-Risk Behaviors

RI Public High School Students

RI Departments of Health and Elementary & Secondary Education

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Introduction: This report examines differences in health-risk behaviors between male and female high school students in Rhode Island (RI). It evaluates 25 risk-measures from RI's Youth Risk Behavior Survey (YRBS).

The YRBS: The RI YRBS is part of a system of biennial surveys involving random samples of public high school students in 60+ states and munici-palities nationwide. The Centers for Disease Control and Prevention developed the YRBS to monitor behaviors related to the major causes of injury, disease, and mortality. In the spring of 2009, 3,213 RI 9th to 12th grade students participated in the YRBS. The findings here are representative of high school students statewide, and may be used to inform policy and programs alike.

'Gender': Students were asked to self-identify their sex (male/female), and their responses were parsed into those two categories.

Using the data: The relationship between gender and risk behaviors may be 1) 'correlated' and/or 2) 'significant.' 1) 'Correlation' refers to association, not causation (e.g., males used marijuana more often than females, but being male doesn't cause a student to use the drug). The correlation coefficient (*r*) is used to evaluate the association between gender and overall health-risks. An *r*-value of '0.00' is no correlation, and '1.00' is perfect correlation (i.e., the two variables change in tandem). 2) 'Significance' is determined at the 95% level. Because sample surveys produce estimates (which may vary from true population values), the 95% 'significance' level refers to how likely it is that there is an actual or 'real' difference in the estimated rates between two groups. Lastly, the 25 risk-measures are all negative indicators, meaning that lower values are preferable.

2009 Highlights

There was no appreciable difference in overall health-risks for male and female high school students in RI. The correlation between the sex of the student and his or her health-risks was negligible ($r = -0.076$). Of the 25 measures, 16 were similar for both groups, five were significantly better for males and four were significantly better for females (Chart 1).

Violence was generally more common to RI males than females (Chart 1). Almost one in three male students had fought versus less than one in five female students. Dating violence rates were similar between the sexes, but the forced intercourse rate for females (9%) was almost twice that for males. Both RI sexes had significantly lower rates for fighting than their national peers (Charts 2 & 3).

RI female students were more at-risk for mental health issues than their male counterparts. Not only were they more likely to feel 'sad' or 'hopeless' (30% vs. 20%), they were also more likely to have planned suicide (13% vs. 10%). There was no appreciable difference in RI and U.S. rates for mental health measures.

Current cigarette smoking rates were similar in RI for both sexes, and male students had a significantly lower smoking rate in RI than the nation. More RI male students used any tobacco products, but both sexes had much lower rates for using any tobacco products than their national peers.

Alcohol use was similar for RI males and females, and both groups had significantly lower drinking rates than the national experience. Binge drinking was also lower in RI than the nation for both sexes.

Marijuana use was relatively high in RI. Males were more likely than females to use marijuana, and both genders had higher use rates than the U.S. Other drug use was not significantly different for males versus females, or for RI versus the nation.

RI sexual activity was similar between sexes (and compared to the U.S.), however, unprotected sex was higher for RI female than RI male students.

RI males were generally at greater risk of injury from not wearing seat belts, and both RI sexes had lower rates of riding with drivers that had been drinking, compared to their U.S. counterparts.

RI females had a significantly higher rate of insufficient physical activity than RI males, even though their rate was better (i.e., lower) than the national rate.

While these data show no gender difference in overall health-risks, there were categorical differences between the sexes (e.g., fighting and marijuana use for males, mental health issues and physical activity for females). It is important for educators, healthcare professionals and parents alike to understand and address these disparities to enable the youth to transition into fully functioning, productive adults.

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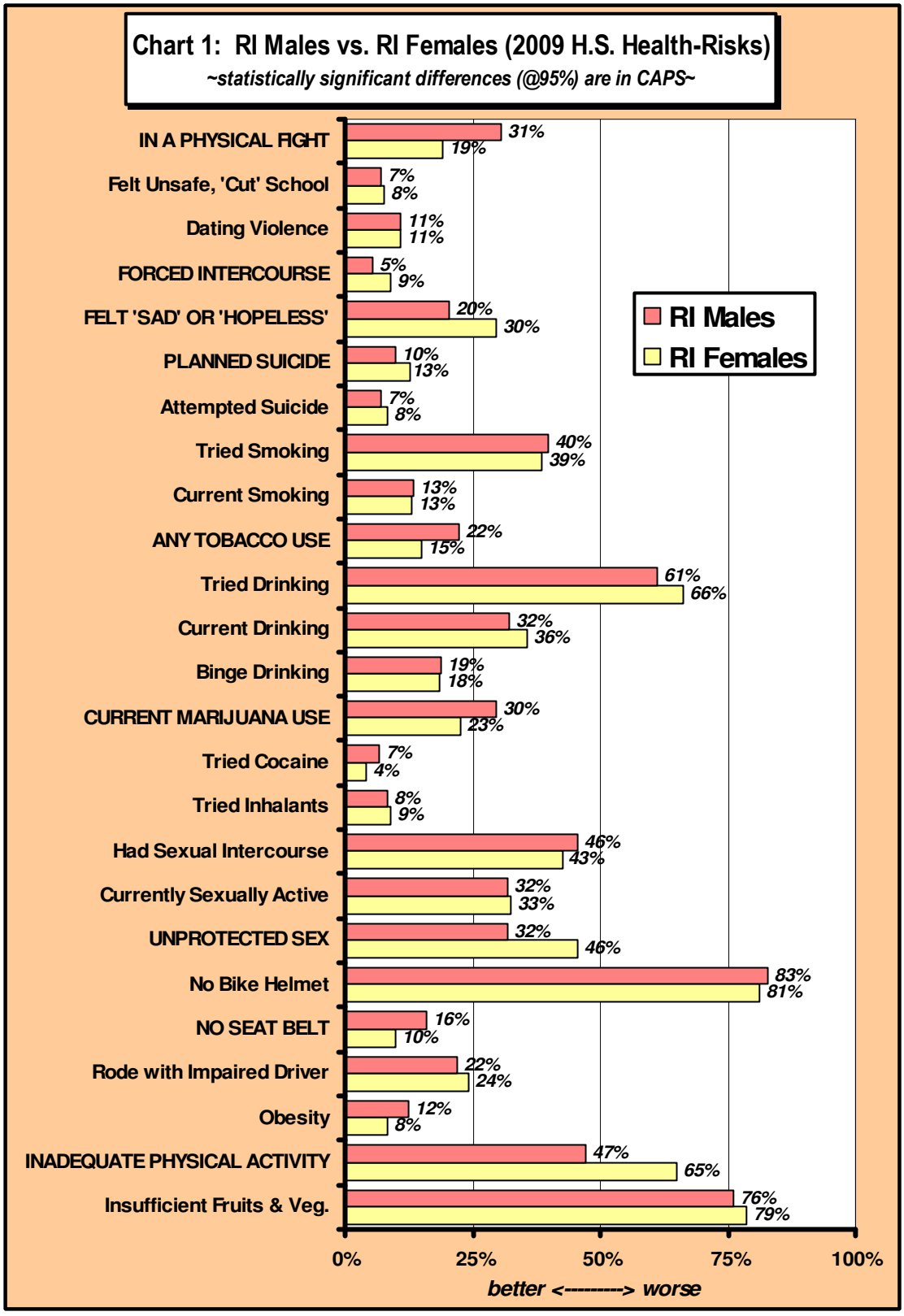
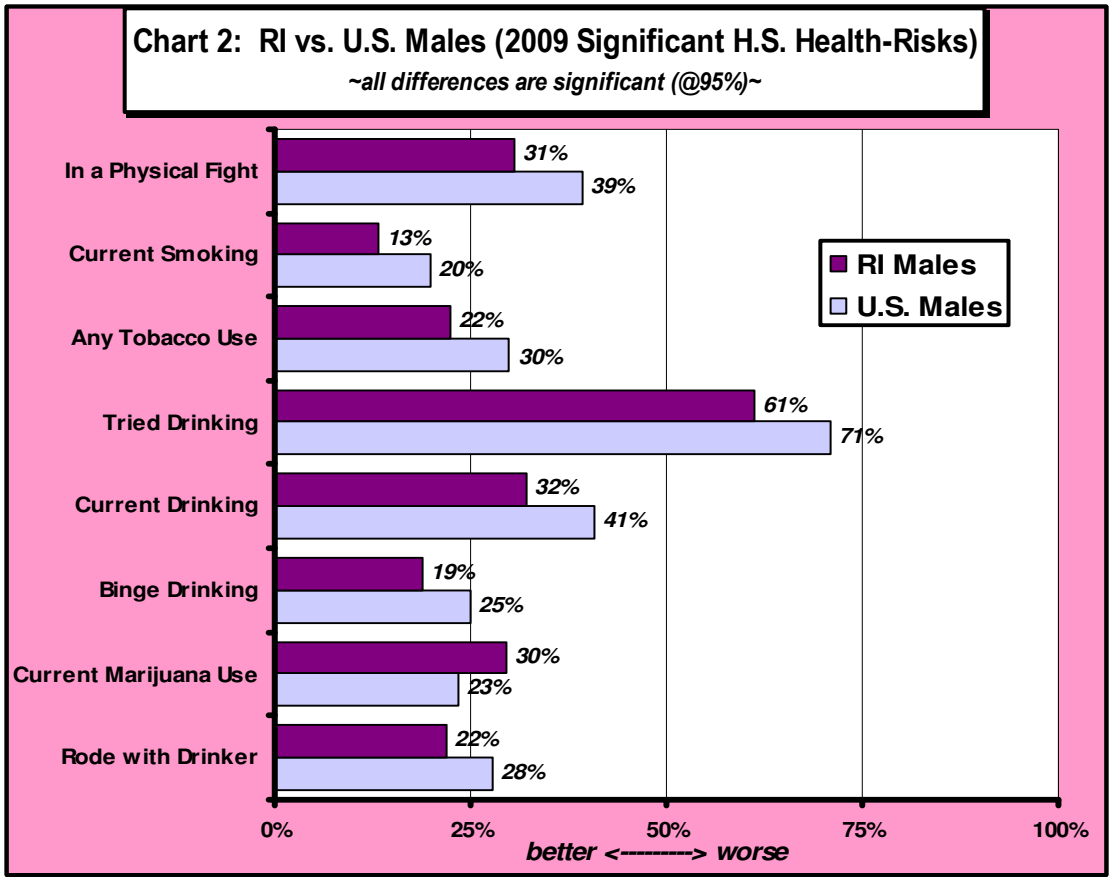
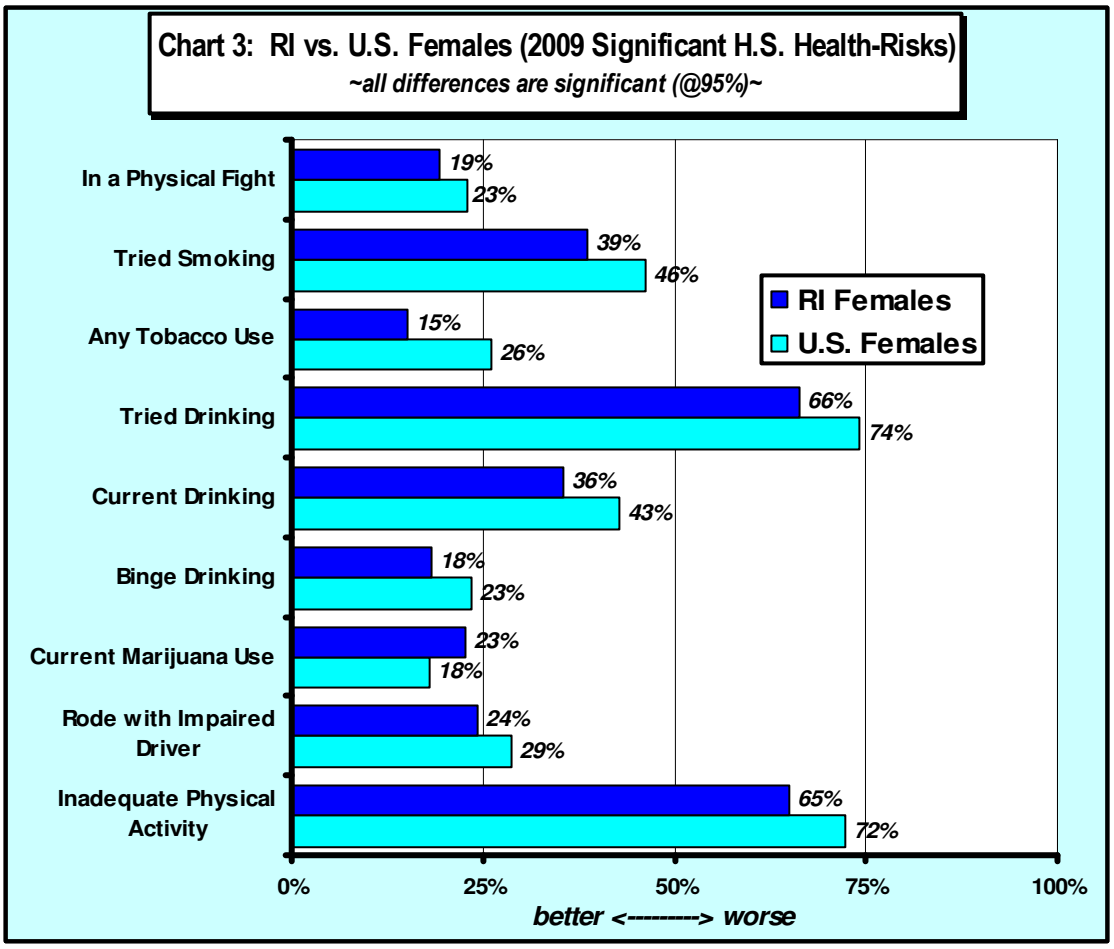
'Youth-at-Risk' topical report series



Source: 2009 RI high school YRBS (n=3,213); raw data and definitions are in Table 1 (p4)





RI Source: 2009 RI high school YRBS (n=3,213); raw data and definitions are in Table 1 (p4)
U.S. Source: http://apps.nccd.cdc.gov/youthonline/App/Default.aspx (n=16,410)
Readers are cautioned that the national data include both public and private high school students while the RI data are only public students

Table 1: High School Health-Risks Data by Gender

	Measure	Description	RI 2009 DATA[1]				U.S. 2009 DATA[2]			
			MALE	FEMALE	Male 95% CIs[3]	Female 95% CIs[3]	MALE	Male 95% CIs[3]	FEMALE	Female 95% CIs[3]
VIOLENCE	In a Physical Fight	*1+ times, past yr.*	30.5%	19.2%	28.1% 33.1%	17.3% 21.2%	39.3%	36.9% 41.7%	22.9%	21.4% 24.4%
	Felt Unsafe, 'Cut' School	*1+ days, past mo.*	6.9%	7.8%	5.2% 9.1%	5.7% 10.7%	4.6%	3.8% 5.6%	5.3%	4.6% 6.1%
	Dating Violence	*hit by boy/girlfriend, past yr.*	10.8%	10.8%	9.0% 12.8%	9.4% 12.3%	10.3%	9.1% 11.6%	9.3%	8.4% 10.3%
	Forced Intercourse	*ever*	5.3%	8.9%	4.0% 7.0%	7.0% 11.3%	4.5%	3.7% 5.6%	10.5%	9.6% 11.4%
MENTAL HEALTH	Felt 'Sad' or 'Hopeless'	*for 2+ wks., past yr.*	20.3%	29.5%	17.3% 23.7%	25.9% 33.4%	19.1%	17.6% 20.6%	33.9%	32.3% 35.5%
	Planned Suicide	*past yr.*	9.8%	12.7%	8.8% 11.0%	11.1% 14.4%	8.6%	7.4% 10.0%	13.2%	12.4% 14.1%
	Attempted Suicide	*1+ times, past yr.*	7.1%	8.3%	5.4% 9.2%	6.6% 10.3%	4.6%	3.9% 5.5%	8.1%	7.2% 9.0%
TOBACCO	Tried Smoking	*ever*	39.9%	38.6%	34.7% 45.4%	35.1% 42.1%	46.3%	42.6% 50.0%	46.1%	43.7% 48.6%
	Current Smoking	*smoked 1+ days, past mo.*	13.3%	13.2%	11.1% 15.9%	10.0% 17.3%	19.8%	17.8% 21.9%	19.1%	17.2% 21.0%
	Any Tobacco Use	*cigs, cigars, smokeless tobac. past mo.*	22.4%	15.1%	19.2% 26.1%	12.0% 18.9%	29.8%	27.0% 32.8%	26.0%	23.8% 28.3%
ALCOHOL	Tried Drinking	*1+ drink on 1+ days, ever*	61.3%	66.4%	56.8% 65.7%	62.2% 70.4%	70.8%	68.4% 73.2%	74.2%	72.4% 76.0%
	Current Drinking	*1+ days, past mo.*	32.2%	35.6%	27.8% 36.9%	31.6% 39.7%	40.8%	38.6% 43.0%	42.9%	41.2% 44.6%
	Binge Drinking	*5+ drinks 1+ days past mo.*	18.9%	18.4%	15.8% 22.5%	15.6% 21.7%	25.0%	22.9% 27.1%	23.4%	21.8% 25.0%
DRUGS	Current Marijuana Use	*1+ times, past mo.*	29.6%	22.7%	26.1% 33.4%	20.2% 25.4%	23.4%	21.8% 25.1%	17.9%	16.2% 19.7%
	Tried Cocaine	*1+ times, ever*	6.8%	4.0%	5.4% 8.5%	2.8% 5.6%	7.3%	6.2% 8.4%	5.3%	4.6% 6.2%
	Tried Inhalants	*1+ times ever*	8.4%	9.0%	6.7% 10.4%	6.6% 12.2%	10.6%	9.2% 12.1%	12.9%	11.8% 14.0%
SEX	Had Sexual Intercourse	*1+ times, ever*	45.6%	42.8%	40.7% 50.6%	38.5% 47.3%	46.1%	41.5% 50.9%	45.7%	43.0% 48.5%
	Currently Sexually Active	*1+ partner, past 3 mos.*	32.0%	32.6%	28.9% 35.3%	27.4% 38.2%	32.6%	29.4% 36.0%	35.6%	33.4% 38.0%
	Unprotected Sex	*no condom last time for sexually active*	31.8%	45.5%	25.1% 39.3%	39.9% 51.1%	31.4%	28.8% 34.0%	46.1%	43.6% 48.6%
INJURY	No Bike Helmet	*'never/rarely' wore in past yr.*	82.8%	81.1%	74.7% 88.7%	74.7% 86.1%	85.8%	81.4% 89.3%	83.1%	79.5% 86.2%
	No Seat Belt	*'never/rarely' wore in past yr.*	16.0%	9.9%	13.0% 19.5%	7.7% 12.5%	11.5%	9.6% 13.8%	7.7%	6.3% 9.4%
	Rode with Impaired Driver	*rode w/alcohol drinker 1+ times, past mo.*	22.0%	24.2%	19.8% 24.4%	21.7% 26.8%	27.8%	26.0% 29.6%	28.8%	27.1% 30.6%
PHYSICAL ACTIVITY	Obesity	*> =95th percentile for BMI*	12.4%	8.2%	10.4% 14.7%	6.2% 10.8%	15.3%	13.3% 17.5%	8.3%	7.5% 9.1%
	Inadequate Physical Activity	*<1hr, 5 days, past wk.*	47.2%	65.1%	42.1% 52.5%	60.2% 69.8%	54.4%	52.4% 56.4%	72.3%	70.1% 74.4%
	Insufficient Fruits & Veg.	*<5 servings/day, past wk.*	76.0%	78.7%	72.6% 79.1%	74.7% 82.2%	76.1%	74.6% 77.6%	79.5%	77.8% 81.2%

[1] *Source: RI high school YRBS (n=3,213)*

[2] *Source: http://apps.nccd.cdc.gov/youthonline/App/Default.aspx (n=16,410)*

[3] *95% Confidence Intervals (CIs) are used to determine statistical significance (e.g., if the CIs of two values overlap, one may not conclude that there is a 'real' difference between the two values as the difference may be due to sampling error)*